



Digital Adrenaline For Your...

# **Chrysler PT Cruiser GT Turbo 2.4**



Powerchip technology enhances your Chrysler to its ultimate level, delivering faster, smoother acceleration in all driving conditions. Whether you enjoy a leisurely weekend cruise or a hard racetrack drive – there is no easier and more effective way to release the potential from your PT Cruiser GT Turbo 2.4 .

The following information is an overview of the performance the Powerchip will deliver. If you have any questions, your Power Consultant will assist you as best as possible. We look forward to giving you the best performance possible from your Chrysler.



<b>Make</b>	Chrysler
<b>Model</b>	PT Cruiser GT Turbo 2.4
<b>Engine</b>	
<b>Year</b>	From Jan 03
<b>Powerchip Code</b>	CHR0006

### Power

In standard form the Chrysler PT Cruiser GT Turbo 2.4 produces 215 hp at the flywheel, and Powerchip improves the engine power to 245 hp.

Power (hp)			
Standard	Bronze/ Silver	Gold 91	Gold 93
215	N/A	238	245

The extra performance achieved by the POWERCHIP allows your vehicle to respond much better than stock PT Cruiser GT Turbo 2.4 s. You will notice an effortless push back into the driver’s seat, to give you a much more enjoyable and at times safer driving experience. The POWERCHIP will tap into your Chrysler’s ‘hidden reserves’, to give you an immediately noticeable improvement from your vehicle – we guarantee it!

## Torque

Torque is a measurement of your engines pulling power, and it's torque that pulls you up hills, allowing your engine a more linear and aggressive acceleration curve. With the POWERCHIP, you notice the increase in torque right throughout the rev range, which gives you far greater flexibility at low engine revolutions. Towing will become less demanding, and you will no longer feel the need to take the engine to the redline in each gear to get the performance you demand... It's always there for you, when you really need it most!

Torque (lb.ft)			
Standard	Bronze/ Silver	Gold 91	Gold 93
245	N/A	274	279



## Acceleration

Increased Power and Torque results in faster acceleration. And it is not just standing start acceleration that is improved, your in-gear acceleration is improved and faster.

If overtaking is important to you, you will feel safe knowing that you spend less time on the "wrong side of the road", improving the safety of your car, for you and your family or passengers.

Perhaps you feel that you need that extra bit of power when you are lined up at the "traffic light grand prix" against another car with similar (or more) power? If you want to have the unfair advantage that will give you more 'GO' away from the lights, you need a Powerchip performance software upgrade for your PT Cruiser GT Turbo 2.4 .

## **Fitting Details**

Your car uses a Surface Mount Chip. Most late model vehicles are fitted with the latest technology Surface Mount Technology chip (SMT). The SMT style chip must be de-soldered by a trained specialist in electronics soldering. The ECU itself is easily removed and should be mailed to Powerchip. Powerchip can usually return the chip within 3 days. We will provide you with detailed instructions upon receipt of order.

## **Driveability**

Beyond the impressive torque and power gains on full throttle, many hours were spent refining the part throttle timing maps for maximum throttle response and driveability. Both the full throttle and part throttle maps are changed for improved driveability in day-to-day driving.

In other words, you don't need to be on the racetrack to notice the Powerchip performance improvement.



## **Manufacturers Tolerances**

Chrysler unfortunately leaves large tolerances in the performance characteristics of its entire fleet to allow for drivers that are negligent on maintenance, and who are non-enthusiasts. The PT Cruiser GT Turbo 2.4 is 'de-tuned' to be able to run on the poorest grade of fuel that the car is likely to encounter anywhere in the world, and also to allow for the small percentage of owners who put their cars reliability to the test due to their lack of mechanical understanding. In most cases, our clients are enthusiasts who place more emphasis on the performance characteristics of their vehicle, and therefore the Powerchip does not need to be programmed as conservatively as the stock software.

## **Modified Spark Advance**



In the old days the ignition distributor controlled the engine spark timing. Changes to the position in the distributor will result in changed ignition settings, and is a good method of 'tune-up' for older vehicles. Modern engine ignition is controlled by a series of tables or maps. These maps give the engine any instructions required to operate, under ALL load and rev per minute access points.

Similar to the old systems, advancing the point of ignition within a cylinder results in increased horsepower and torque. It is important not to advance the timing beyond the capabilities of the fuel used, or else detonation can occur. Peak horsepower is achieved when ignition timing is set as close to the point of detonation as possible, without exceeding it. This is the primary purpose for asking the octane rating each client uses most frequently, so that the software is set to the correct level of ignition advance for the fuel used.

The end result of ignition advance changes is increased horsepower and torque, resulting in better acceleration and various other driving benefits.

## **49 State Emissions Legal**

The Powerchip complies with U.S. EPA Memorandum 1A, or it has not been found nor is believed to be unlawful for use under the provisions of the Clean Air Act. Currently, Powerchip is not legal in California for vehicles that may be used on a highway. Powerchip is currently undergoing testing for certification under the Californian Air Resources Board (CARB) exemption process.

## **Our Satisfaction Guarantee**

Every Powerchip sold in North America comes with an unconditional 14 day money back guarantee. This ensures that the Powerchip will live up to your expectations, not ours! If for any reason you are unsatisfied with the Powerchip, you may return the Powerchip to your place of purchase for a full refund of the purchase price (not including shipping and handling, installation and removal etc.).



Our satisfaction guarantee offers you total peace of mind, and makes the purchase of the Powerchip risk free. By purchasing a Powerchip you have nothing to lose – and everything to gain!

## **Octane ratings**

The Powerchip is designed to get the best from your engine, and to do this you must use a high performance fuel (91 Octane minimum). It is not possible to improve the performance on late model fuel injected vehicles using poor quality fuels, such as 87 or 89 octane. When ordering your Powerchip upgrade, your Power Consultant will ask you for the octane rating you would like your program to run.

Powerchip Gold 91 is designed to run on fuel with an octane rating of either 91 or 92. Powerchip Gold 93 is designed to run on fuel with an octane rating of 93 or higher. We highly recommend that you use the highest-octane fuel available to you, such as 92, 93 or 94 octane if a higher than 91-octane fuel is available.

## Warranty

All Gold 93 Powerchips come with a three year, unlimited mile warranty, which means that if anything occurs with the Powerchip in that time, we will replace it without charge to you. An optional extended Powerchip warranty is also available at an additional \$90 at the time of ordering. This extends the warranty period on any Power chip to six years. An optional drive-train warranty is also available for \$190 at the time of ordering your Powerchip. This would cover damage to the drive-train in the unlikely event of damage caused by the Powerchip.

The terms and conditions of the Powerchip warranties can be viewed in detail on our web site at <http://www.powerchipgroup.com>.



To briefly summarize the information: if your car is covered by a new or dealer warranty, the dealer may not 'void' a warranty simply because you have fitted an aftermarket product. SEMA, the automotive aftermarket industry body in North America has made the following statements regarding aftermarket products such as performance chips...

"The vehicle manufacturer is not allowed to void the vehicle warranty just because aftermarket equipment is installed on the vehicle..."

"...In cases where such a failed aftermarket part is responsible for a warranty claim, the (vehicle) manufacturer must arrange a settlement with the part manufacturer, but the new vehicle warrant is not void under the law."

"If the failure to honor a claim involves the new-vehicle warranty, and it appears that the (vehicle) manufacturer is improperly denying a claim, the incident should be reported to the Federal Trade Commission (FTC)."

The fitment of the Powerchip will not have a detrimental effect on your vehicle performance or engine longevity, and therefore does not interfere with the manufacturers warranty in any way.

## Value for a Lifetime

The investment you make in the Powerchip will last for as long as you keep your car, and for most of our customers, that is normally for 3 or 4 years. So when you consider the benefits of the chip over a number of years, it is not a lot to pay for extra performance you will probably use nearly every day. As a percentage of the total cost of your car, the Powerchip works out to be very cost effective.

## Cost Effectiveness

As we all know, modifying late model vehicles is not a cheap exercise, however, when you look at it on a hp per dollar basis, the POWERCHIP comes in ahead of any other modification you could make to your Chrysler. Have a look at just how well the POWERCHIP stacks up:



<b>Price</b>	<b>\$490</b>
<b>hp Gain</b>	<b>30 hp</b>
<b>Price/hp</b>	<b>\$16.33</b>

The POWERCHIP is designed to offer excellent value for money compared with other modifications you might be planning in the future.

<b>COST USD(\$)</b> (not including shipping/handling)			
<b>Bronze</b>	<b>Silver</b>	<b>Gold 91</b>	<b>Gold 93</b>
<b>N/A</b>	<b>N/A</b>	<b>\$490</b>	<b>\$490</b>

## Ask the Experts

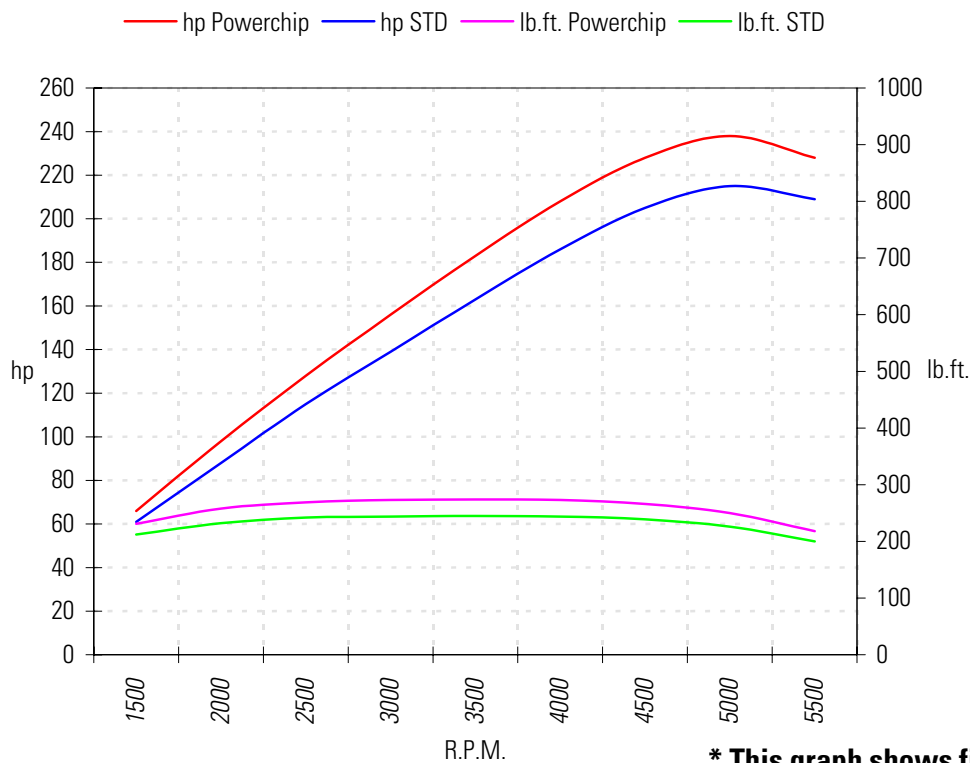
Your POWERCHIP Power Consultant is trained to provide you with the best information about getting more performance for your car. We have a specific Power Consultant who is responsible for the Chrysler range, and he is an expert at answering all of your technical questions, especially about the PT Cruiser GT Turbo 2.4 . If you would like to speak with your Power Consultant about any aspect of the upgrade, please telephone Toll Free North American headquarters in California on 1800-495 0777 or email your Chrysler Power Consultant directly at [jayson@powerchipgroup.com](mailto:jayson@powerchipgroup.com).

© Powerchip Group, All Rights Reserved. Reproduction by any means is prohibited.

**Gold 91 Performance Data for your...**

**Chrysler PT Cruiser GT Turbo 2.4 \***

R.P.M.	hp STD	hp Powerchip	hp Gain	lb.ft. STD	lb.ft. Powerchip	lb.ft. Gain
1500	61	66	5	212	231	19
2000	88	98	10	232	258	26
2500	115	128	13	242	269	27
3000	139	156	17	244	273	29
3500	163	183	20	245	274	29
4000	186	208	22	244	273	29
4500	205	228	23	239	266	27
5000	215	238	23	226	250	24
5500	209	228	19	200	218	18



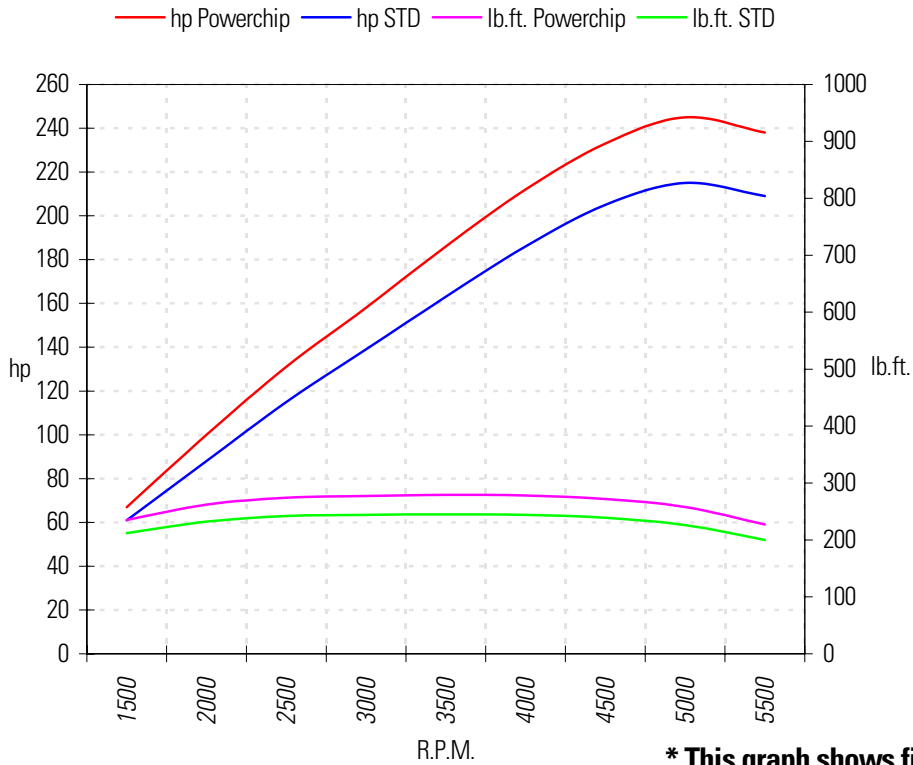
**\* This graph shows figures for Powerchip Gold 91**

MODEL	ENGINE	VERSION	CAPACITY	Max hp	Max lb.ft.	0-60 Auto	0-60 Man
PT Cruiser GT Turbo 2.4		Standard	2429cc	215	245	N/A	N/A
PT Cruiser GT Turbo 2.4		Gold 91	2429cc	238	274	N/A	N/A

**Gold 93 Performance Data for your...**

**Chrysler PT Cruiser GT Turbo 2.4 \***

R.P.M.	hp STD	hp Powerchip	hp Gain	lb.ft. STD	lb.ft. Powerchip	lb.ft. Gain
1500	61	67	6	212	235	23
2000	88	100	12	232	262	30
2500	115	131	16	242	274	32
3000	139	158	19	244	277	33
3500	163	186	23	245	279	34
4000	186	212	26	244	278	34
4500	205	233	28	239	272	33
5000	215	245	30	226	258	32
5500	209	238	29	200	227	27



**\* This graph shows figures for Powerchip Gold 93**

MODEL	ENGINE	VERSION	CAPACITY	Max hp	Max lb.ft.	0-60 Auto	0-60 Man
PT Cruiser GT Turbo 2.4		Standard	2429cc	215	245	N/A	N/A
PT Cruiser GT Turbo 2.4		Gold 93	2429cc	245	279	N/A	N/A

